



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,810	07/25/2001	Martin M. Matzuk	P01925US1	2015
26271	7590	10/02/2003	EXAMINER	
FULBRIGHT & JAWORSKI, LLP 1301 MCKINNEY SUITE 5100 HOUSTON, TX 77010-3095			DESAI, ANAND U	
			ART UNIT	PAPER NUMBER
			1653	

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/830,810	MATZUK ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Anand U Desai	1653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-57 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
     If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
     \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
     a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, drawn to a substantially pure O1-180 polypeptide.

Group II, claim(s) 2-10, drawn to an isolated polynucleotide for O1-180, an expression vector including the isolated polynucleotide, a prokaryotic or eukaryotic host cell containing the expression vector.

Group III, claim(s) 11, drawn to a substantially pure O1-184 polypeptide.

Group IV, claim(s) 12-20, drawn to an isolated polynucleotide for O1-184, an expression vector including the isolated polynucleotide, a prokaryotic or eukaryotic host cell containing the expression vector.

Group V, claim(s) 21, drawn to a substantially pure O1-236 polypeptide.

Group VI, claim(s) 22-30, drawn to an isolated polynucleotide for O1-236, an expression vector including the isolated polynucleotide, a prokaryotic or eukaryotic host cell containing the expression vector.

Group VII, claim(s) 31, drawn to an antisense polypeptide encoded by a nucleotide sequence complimentary to SEQ ID NO:1.

Group VIII, claim(s) 32, drawn to an antisense polypeptide encoded by a nucleotide sequence complimentary to SEQ ID NO:3.

Group IX, claim(s) 33, drawn to an antisense polypeptide encoded by a nucleotide sequence complimentary to SEQ ID NO:5.

Group X, claim(s) 34-40, drawn to a transgenic mouse comprising a disruption of its genome in the O1-236 gene and a method of making a transgenic mouse comprising a disruption of its genome in the O1-236 gene.

Group XI, claim(s) 41-47, drawn to a transgenic mouse comprising a disruption of its genome in the O1-180 gene and a method of making a transgenic mouse comprising a disruption of its genome in the O1-180 gene.

Art Unit: 1653

Group XII, claim(s) 48-54, drawn to a transgenic mouse comprising a disruption of its genome in the O1-184 gene and a method of making a transgenic mouse comprising a disruption of its genome in the O1-184 gene.

Group XIII, claim(s) 55-57, drawn to a transgenic mouse comprising the disruption of its genome in more than one of the O1-236, O1-180, or O1-184 genes and a method of making a transgenic mouse comprising a disruption of its genome in more than one of the O1-236, O1-180, or O1-184 genes.

2. The inventions listed as Groups I-XIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Inventions I-XIII are distinct because they are different products. They are not obvious variants of each other. Inventions I, III, V, VII, VIII, and IX are drawn to different polypeptides. Inventions II, IV, and VI are drawn to different polynucleotides, vectors which comprise the polynucleotides, and host cells containing the vectors. Inventions X, XI, XII, and XIII are drawn to different transgenic mice.

Although the polynucleotide molecule and polypeptide are related since the polynucleotide encodes the polypeptide, they are distinct inventions because the polypeptide product can be made by another and materially different process, such as by synthetic peptide synthesis or purification from the natural source. Further, the polynucleotide may be used for processes other than the production of the polypeptide, such as nucleic acid hybridization assay.

The polypeptides of inventions I, III, V, VII, VIII, and IX have different structures and therefore, these inventions are distinct.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Application/Control Number: 09/830,810  
Art Unit: 1653

Page 4

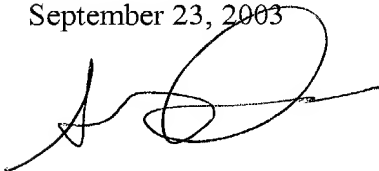
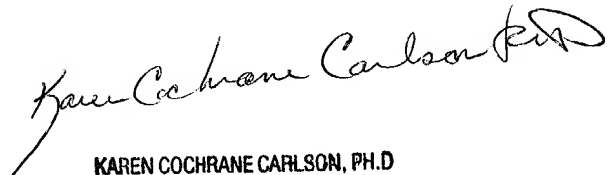
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anand U Desai whose telephone number is (703) 305-4443. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Low can be reached on (703) 308-2923. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0198.

\*\*\*

September 23, 2003

A handwritten signature in black ink, appearing to be 'A. Desai', written over the date.A handwritten signature in black ink that reads 'Karen Cochrane Carlson' followed by a stylized monogram.

KAREN COCHRANE CARLSON, PH.D  
PRIMARY EXAMINER